

**ABSTRACT OF THE DISCLOSURE**

A computed tomography unit includes a radiation detector with several detector elements, a data recording system for reading the electrical signals generated by the detector elements and the processing thereof to give raw data may be supplied via a data transmission path. The computed tomography unit further includes an analytical device for the automatic determination of the quality of the data recording system and/or of the data transmission path and optionally the radiation detector in addition. The analytical unit in particular initiates a measurement for the generation of raw data, calculates at least one value for at least one parameter which permits a quality determination therefrom and displays an analytical result, which incorporates the calculated value, on a display device.